Message

From: Fernandez, Cristina [Fernandez.Cristina@epa.gov]
Sent: 7/27/2021 4:52:11 PM
To: Chow, Alice [chow.alice@epa.gov]; Delgrosso, Karen [Delgrosso.Karen@epa.gov]
Subject: RE: EtO emissions

Thanks!

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Sent: Tuesday, July 27, 2021 12:25 PM
To: Fernandez, Cristina <Fernandez.Cristina@epa.gov>; Delgrosso, Karen <Delgrosso.Karen@epa.gov>
Subject: EtO emissions

EtO major sources of emissions: Commercial Sterilizers versus Chemical plants

Commercial Sterilizers

- The sterilizer is typically housed in a room with negative pressure. The control unit is situated outside of the room. There are very little to no fugitive emissions outside of the room due to the negative pressure.
- B. Braun is a commercial sterilizer that installed a new thermal oxidizer with greater than 99.9% control efficiency. The emissions are released through a stack.

Chemical plants that produce EtO

- The process units for EtO have miles of connections as well as connections to loading and unloading areas, storage, etc. There are fugitive emissions from these connections. Fugitive emissions are unintentional leaks emitted from sealed surfaces, such as packings and gaskets, or leaks from underground pipelines resulting from corrosion or faulty connections.
- Union Carbide facilities (S. Charleston and Institute) are also connected to a 6 mile long pipeline between the facilities.
- It is estimated by WVDEP that fugitive leaks constitute about 40% of the EtO emissions from these facilities. Also, fugitive emissions are often at ground level and is transported offsite that can impact communities.
- While Union Carbide facilities have leak detection and repair requirements, i.e., a leak detected does not constitute a violation, the regs allow the companies 30 days to fix a leak. However, with the potential for many possible fugitive leaks, it is difficult to constantly monitor and track them.

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